



Octopus EV - Tariffs for Charging and Using Smart Charging (Ohme cable and V2G)

Charlie Cook

Smart Projects Manager – Octopus Electric Vehicles

LCV2019 Event Sponsor:

GEOTAB[®]
management by measurement

Octopus Electric Vehicles

EV leasing & charging solutions

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electric vehicles

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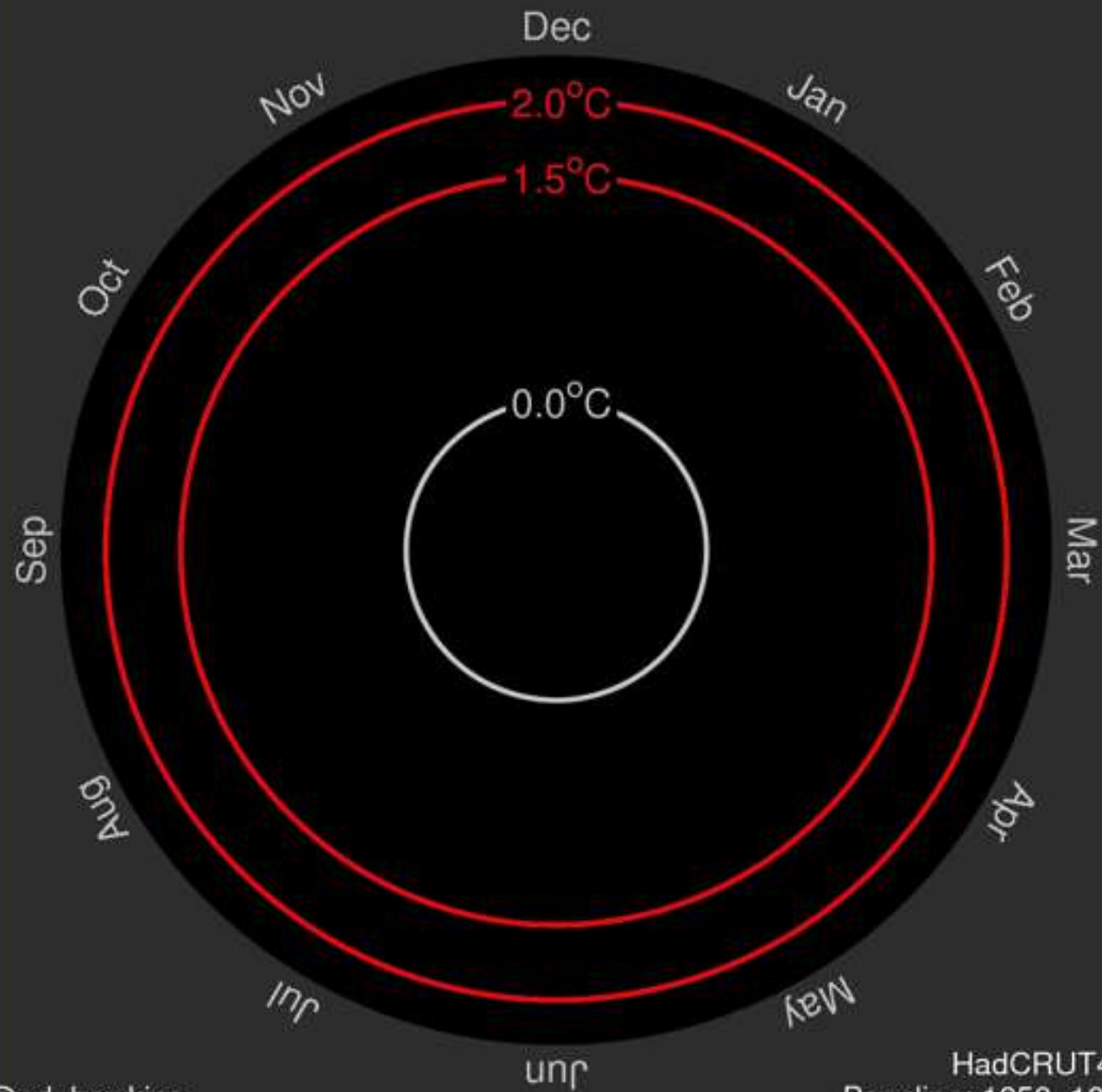


Tariffs for Charging and Using Smart Charging (Ohme cable and V2G)

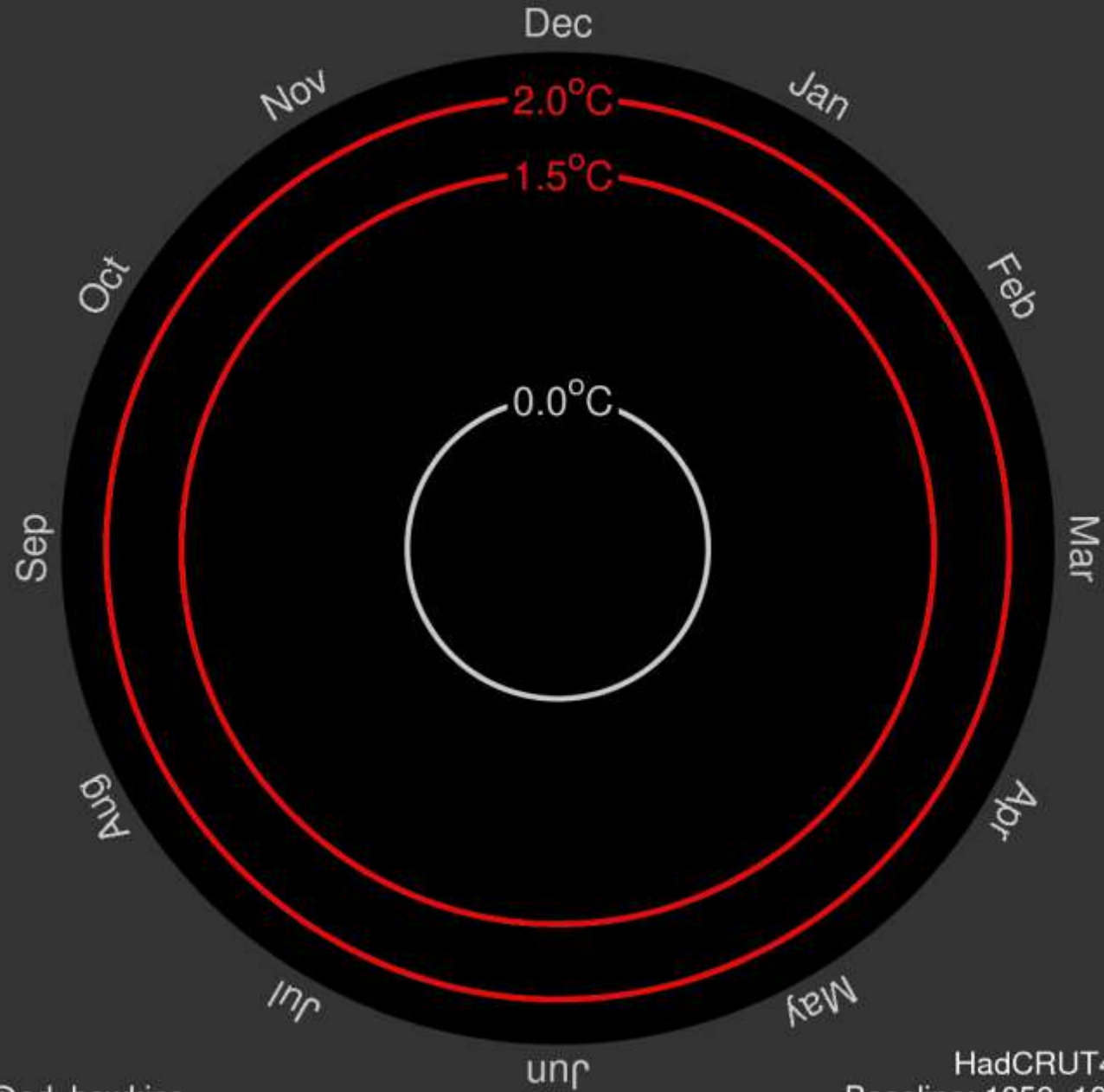
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Global temperature change (1850–2017)

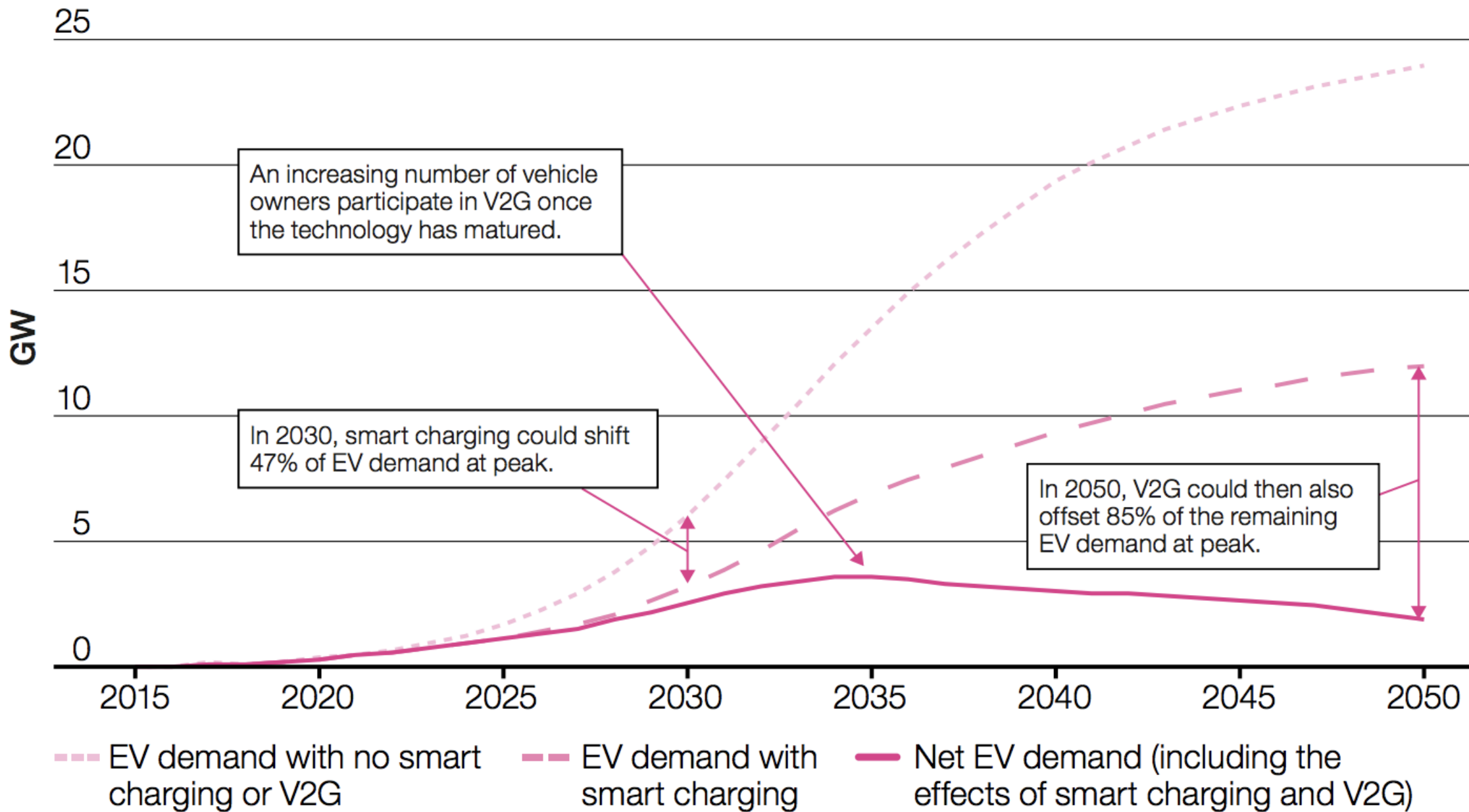


Global temperature change (1850–2017)





* ELECTRICITY BUZZING *



The **Octopus Agile** tariff has shown us the effectiveness of price signals...

Agile Octopus

A consumer-led shift to a low carbon future



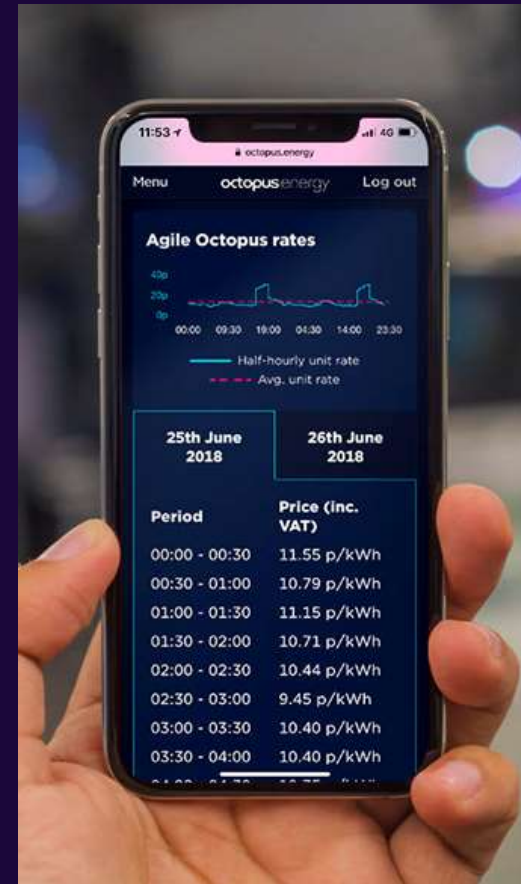
Period	16th September 2019	19th September 2019
00:00 - 00:30	5.18 p/kWh	5.18 p/kWh
00:30 - 01:00	4.18 p/kWh	4.18 p/kWh
01:00 - 01:30	3.05 p/kWh	3.05 p/kWh
01:30 - 02:00	2.25 p/kWh	2.25 p/kWh
02:00 - 02:30	2.32 p/kWh	2.32 p/kWh
02:30 - 03:00	2.52 p/kWh	2.52 p/kWh
03:00 - 03:30	2.52 p/kWh	2.52 p/kWh
03:30 - 04:00	2.52 p/kWh	2.52 p/kWh
04:00 - 04:30	3.47 p/kWh	3.47 p/kWh

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octopus.energy/agile-report

Key features

- Half hourly dynamic time of use tariff
- 4:30pm - prices published for the day ahead
- Price Cap Protect limits spikes to 35p / kWh
- Switch to any of our other tariffs instantly
- Switch to any other supplier with no exit fees
- Limited to 500 customers during trial period



Why does this work?

5p plastic bag tax



= 95% reduction in use



Saturday
10th March 2018

For electricity meter 17P3001648

Total cost

£ 0.79

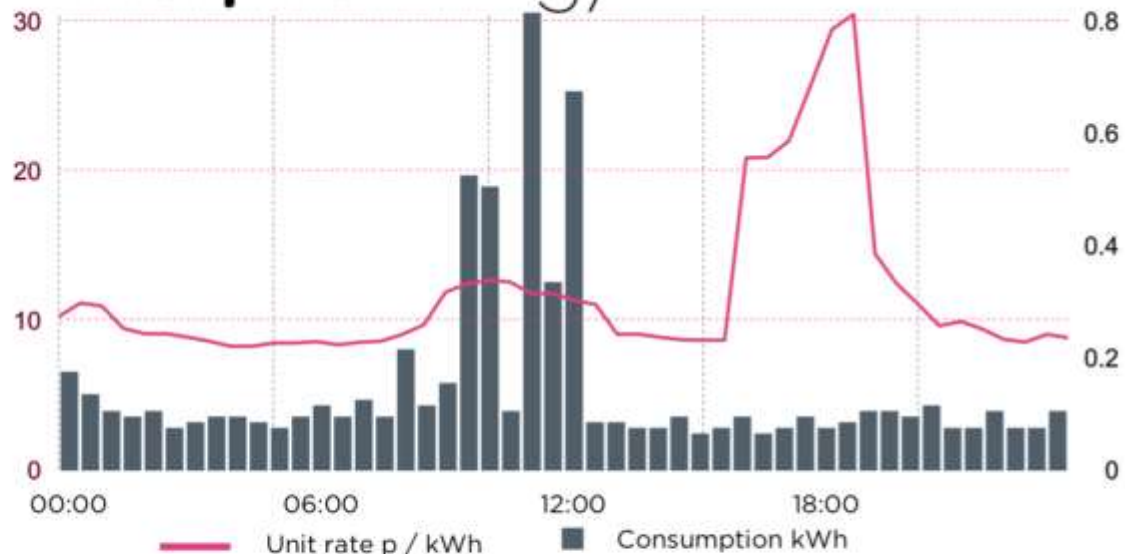
Total consumption

6.83 kWh

Weighted average unit rate

11.60 p / kWh

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Period	Rate p / kWh	Consumption kWh	Cost p
00:00 - 00:30	10.20	0.17	1.734
00:30 - 01:00	11.09	0.13	1.442
01:00 - 01:30	10.89	0.10	1.089
01:30 - 02:00	9.40	0.09	0.846
02:00 - 02:30	9.04	0.10	0.904
02:30 - 03:00	9.04	0.07	0.633
03:00 - 03:30	8.81	0.08	0.705
03:30 - 04:00	8.54	0.09	0.769
04:00 - 04:30	8.20	0.09	0.738
04:30 - 05:00	8.20	0.08	0.656
05:00 - 05:30	8.42	0.07	0.589
05:30 - 06:00	8.42	0.09	0.758
06:00 - 06:30	8.51	0.11	0.936
06:30 - 07:00	8.30	0.09	0.747
07:00 - 07:30	8.47	0.12	1.016
07:30 - 08:00	8.54	0.09	0.769
08:00 - 08:30	9.00	0.21	1.890
08:30 - 09:00	9.64	0.11	1.060
09:00 - 09:30	11.82	0.15	1.773

Sunday
18th March 2018

For electricity meter 17P3001648

Total cost

£ 2.26

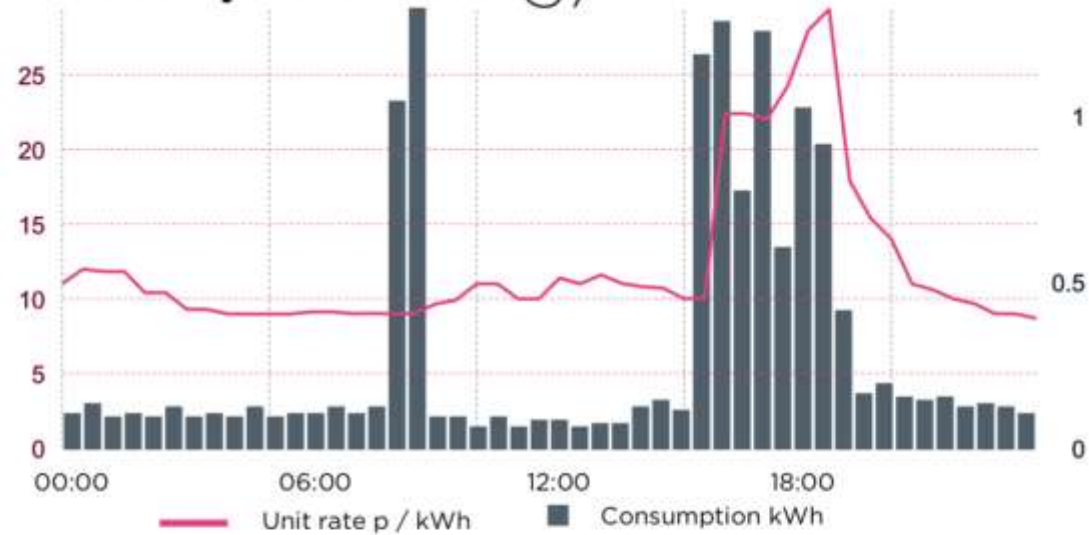
Total consumption

13.82 kWh

Weighted average unit rate

16.36 p / kWh

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Period	Rate p / kWh	Consumption kWh	Cost p
00:00 - 00:30	11.00	0.10	1.100
00:30 - 01:00	11.98	0.13	1.557
01:00 - 01:30	11.82	0.09	1.064
01:30 - 02:00	11.82	0.10	1.182
02:00 - 02:30	10.40	0.09	0.936
02:30 - 03:00	10.40	0.12	1.248
03:00 - 03:30	9.30	0.09	0.837
03:30 - 04:00	9.28	0.10	0.928
04:00 - 04:30	8.98	0.09	0.808
04:30 - 05:00	8.98	0.12	1.078
05:00 - 05:30	8.98	0.09	0.808
05:30 - 06:00	8.98	0.10	0.898
06:00 - 06:30	9.12	0.10	0.912
06:30 - 07:00	9.12	0.12	1.094
07:00 - 07:30	9.00	0.10	0.900
07:30 - 08:00	9.02	0.12	1.082
08:00 - 08:30	8.98	1.04	9.339
08:30 - 09:00	9.02	1.32	11.906
09:00 - 09:30	9.64	0.09	0.868
09:30 - 10:00	9.91	0.09	0.892
10:00 - 10:30	11.00	0.06	0.660
10:30 - 11:00	11.00	0.09	0.990

Thursday
22nd March 2018

For electricity meter 17P3001648

Total cost

£ 1.85

Total consumption

18.48 kWh

Weighted average unit rate

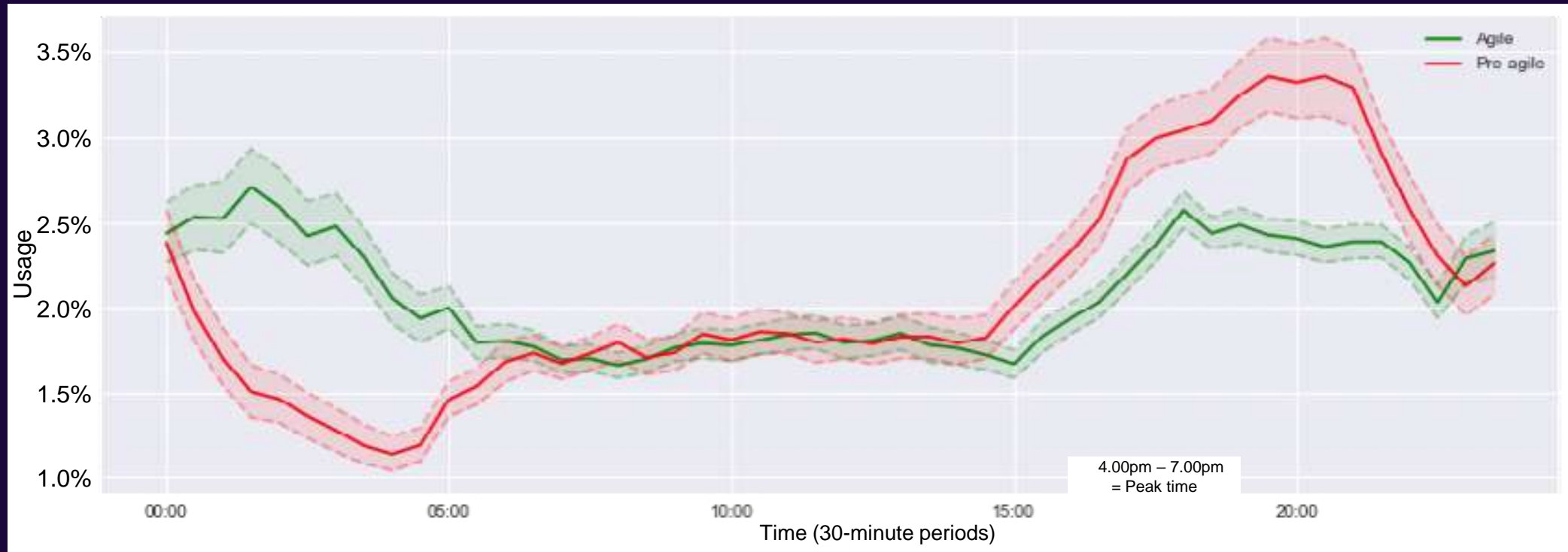
10.01 p / kWh

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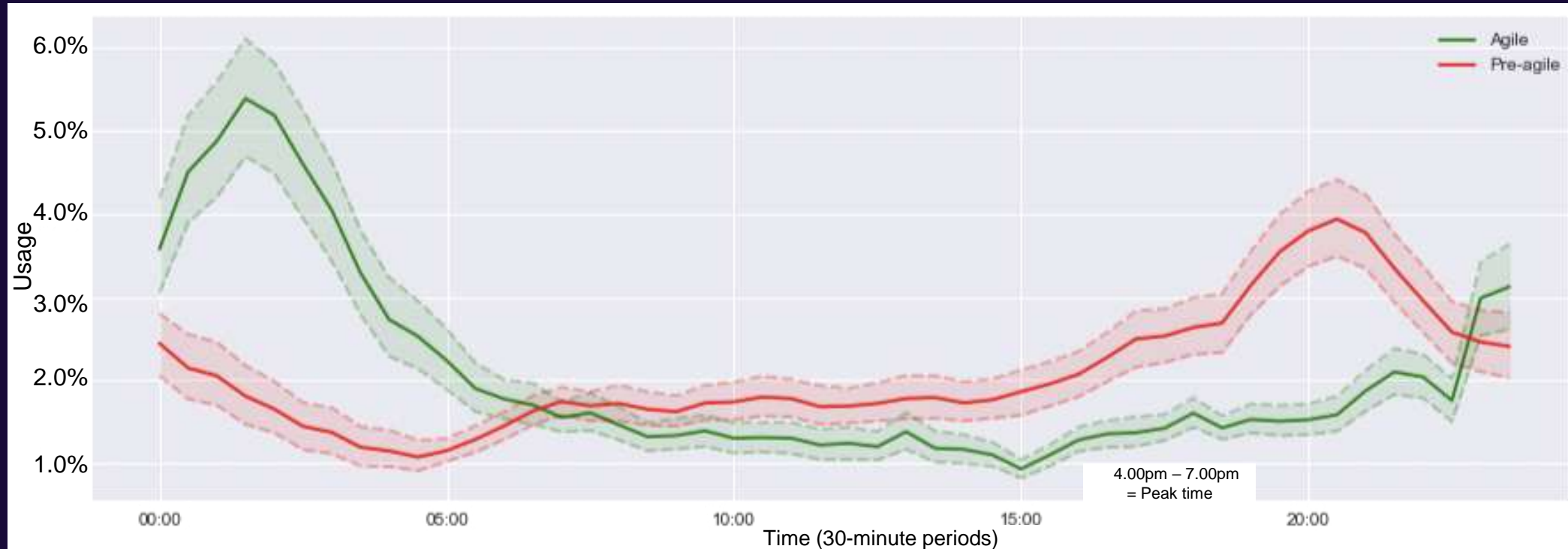
Period	Rate p / kWh	Consumption kWh	Cost p
00:00 - 00:30	9.07	0.07	0.635
00:30 - 01:00	10.49	0.08	0.839
01:00 - 01:30	10.46	0.10	1.046
01:30 - 02:00	9.90	0.07	0.693
02:00 - 02:30	9.10	3.82	34.762
02:30 - 03:00	8.90	3.88	34.532
03:00 - 03:30	9.20	3.91	35.972
03:30 - 04:00	9.10	1.04	9.464
04:00 - 04:30	9.27	0.07	0.649
04:30 - 05:00	9.27	0.13	1.205
05:00 - 05:30	10.40	0.20	2.080
05:30 - 06:00	9.48	0.46	4.361
06:00 - 06:30	12.00	0.28	3.360
06:30 - 07:00	11.60	0.09	1.044
07:00 - 07:30	13.09	0.10	1.309
07:30 - 08:00	14.58	0.12	1.750
08:00 - 08:30	14.00	0.07	0.980
08:30 - 09:00	13.00	0.07	0.910
09:00 - 09:30	12.68	0.25	3.170
09:30 - 10:00	11.61	0.49	5.689

Behaviour change of whole cohort



Agile Octopus consumers shifted consumption out of the peak period by 28%
And reduced CO2 emissions (UK Carbon Intensity data)

EV drivers demonstrate the greatest sensitivity to price signals



Electric Vehicle Agile Octopus customers reduced their peak-period consumption by 47%

Agile customer cohort	Annual savings vs Octopus 12M Fixed Tariff	Annual Savings vs Big 6 average SVT
Full sample	£45	£188
EV drivers	£132	£338

EV drivers demonstrate the greatest sensitivity to price signals. And gain the most.

We offer customers smart charging with **Agile, Go** and our charging products

Octopus Go from Octopus Energy

The tariff designed just for Electric Vehicle drivers



- Just 5p/kWh between 00:30 - 04:30 every night
- Four hours fully charges a 30kWh Nissan Leaf

OR

Agile Octopus

The 100% green electricity tariff with Plunge Pricing



Smart charging technology such as the Ohme Cable



The Powerloop leasing bundle

From £299 per month for:



A lease agreement on a brand-new Nissan Leaf



Money off your monthly lease if you charge regularly



100% renewable electricity for your home



Smart meter installed free of charge



An app to remotely control your charging



A free Vehicle-to-Grid compatible charger

www.octopus.energy/powerloop

Octopus Electric Vehicles

EV leasing & charging solutions



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Smart Project Manager - Octopus EVs